



**National Aeronautics and
Space Administration**

April 30, 1997

NRA-97-MTPE-05

RESEARCH ANNOUNCEMENT

**Centers of Excellence in Applications of Remote Sensing to
Regional and Global Integrated Environmental Assessments**

Proposals Due June 27, 1997

OMB Approval No. 2700-0087

**Centers of Excellence in Applications of Remote Sensing to
Regional and Global Integrated Environmental Assessments**

**NASA Research Announcement
NRA 97-MTPE-05
Issued April 30, 1997
Letters of Intent due May 21, 1997
Proposals due June 27, 1997**

**Office of Mission to Planet Earth
National Aeronautics and Space Administration
Washington, DC 20546**

I. Introduction

The mission of NASA's Planet Earth Strategic Enterprise is to develop understanding of the total Earth system and the effects of natural and human-induced changes on the global environment. The Science Division of the Office of Mission to Planet Earth (MTPE) supports research and analysis that would promote and increase the use of remotely sensed information for detecting and evaluating environmental status and change at both regional and global scales. This NASA Research Announcement (NRA) plans a limited number of grants for the acquisition of research equipment, instruments, or software for teaching/training and research centers of excellence in the application of remote sensing to regional or global integrated environmental assessments. All awardees would receive grants in accordance with 14 CFR Part 1260; grants can only be awarded to US institutions of higher education, hospitals, and other non-profit organizations including state and local governments. Proposals submitted in response to this announcement will be competing for about \$5 million in Fiscal Year 1997.

Further information about the Mission to Planet Earth programs and about the framework for integrating the Nation's environmental monitoring and research networks and programs as proposed by the Committee on Environment and Natural Resources (CENR) of the National Science and Technology Council (NSTC), Office of Science and Technology Policy (OSTP), are available electronically; see Appendix A for relevant URL addresses.

II. Goals

The goals of this NRA are to:

1. Support the acquisition, through purchase, upgrade, or development, of state-of-the-art image processing and computing laboratories for use of remote sensing in environmental monitoring and research, as well as for research training and education at U.S. academic institutions;
2. Improve access to remote sensing observations and increase use of remote sensing knowledge in the integration of environmental monitoring and research networks and programs across temporal and spatial scales and among resources;
3. Enable academic departments or cross-institutional units to create well-equipped learning environments that encourage use of remote sensing in research and monitoring;
4. Foster the development of next-generation environmental monitoring systems that will contribute to regional and global environmental assessments;
5. Encourage increased emphasis on capabilities for data fusion using observations from multiple satellites, *in situ* measurements, and socioeconomic data; and
6. Promote partnerships between academic researchers and environmental practitioners in Federal, state, local and non-governmental organizations, as well as private-sector remote sensing industry.

III. Scope

This NRA assists in the acquisition of major equipment needed in the development of environmental remote sensing laboratories by U.S. institutions that is, in general, too costly

for support through the Research & Analysis (R&A) programs in the MTPE Science Division. Proposals may be for a single piece or multiple pieces of equipment, or system upgrades that support an environmental research focus. Image processing systems, clusters of advanced workstations, networks, and other information infrastructure components or instrumentation necessary for the capabilities of applying remote sensing to integrated environmental assessments are encouraged. Particular emphasis is given to those unique or new capabilities in research and training that will ensue from the acquisition of equipment. The equipment should be for both teaching/training and research projects. Proposals for computer networks as general purpose equipment will not be reviewed. A list of assorted software, instruments, or general laboratory equipment that do not share a common research and teaching/training focus will not be reviewed. This solicitation will not support renovation or modernization of buildings or laboratories. The grants to be selected will be for one year and will typically range from \$30,000 to \$500,000.

IV. Eligible project costs

Eligible project costs include costs of equipment, software, maintenance and appropriate technical support. Appropriate technical support refers to technical personnel and associated indirect costs necessary for the operation and maintenance of the remote sensing laboratories. Travel expenses necessary for training technical support staff in the operation and maintenance of these laboratories may be eligible project costs if appropriate justification is presented.

Support for students, research assistants, postdoctoral research associates, secretarial and clerical personnel are not eligible project costs. Faculty salaries for a total period not exceeding three months are eligible project costs only in the case of the principal or co-investigators (PI or Co-I's) if the environmental remote sensing laboratories are sufficiently complex and appropriate justification is presented.

V. Cost sharing/matching requirements

There should be strong existing institutional or multi-institutional support for the center of excellence in the application of remote sensing to environmental monitoring and research. The institution(s) should commit to the maintenance and technical support personnel costs as well as full support for the equipment and facilities after the award expires. The institution(s) are required to provide substantial cost sharing for the proposed project at a minimum of 10 percent of the budget requested of NASA during the award period. The cost sharing may be from any private or non-Federal public source and may be cash, or any eligible project item. Manufacturers' discounts are encouraged for reducing total project costs, but are not eligible institutional cost sharing.

VI. Proposal format

Proposals in response to this NRA should be prepared and submitted in accordance with the general instructions for responding to NASA Research Announcements contained in Appendix B. More specific guidelines for responding to this NRA are provided below. Note that all awardees will receive grants in accordance with 14 CFR Part 1260; also, the guidelines below shall be used wherever conflicts exist with Appendix B.

Proposals that do not adhere to the format below or the stated page limitations will not be reviewed. The content of each proposal should include:

1. *Cover Page* (See Appendix C).
2. *Table of Contents* (Paginated).
3. *Project Summary* (Maximum length, 1 page). Describe the proposed equipment and the type of teaching/training and research that would result if the proposal is supported by NASA.
4. *Project Description* (Maximum total length, 15 pages, including all figures and charts):
 - a. *Results from Prior NASA Support* (Maximum length, 5 pages). Include this section only if the PI or a Co-I has received NASA support for research.
 - b. *Research Activities* (Maximum length, 6 pages). Describe the research projects and teaching/training activities to be conducted with the desired equipment, and sources of support, if any. In narrative or tabular form, list the personnel, by number and type (e.g., senior personnel, postdoctoral fellows, practicing professionals, and graduate and undergraduate students) who will be using the equipment on a regular basis for teaching, research, or research training.
 - c. *Description of the Research Equipment and Needs* (Maximum length, 4 pages). Provide a technical description of the requested equipment, including manufacturer and model number. The description should be comprehensive enough to allow reviewers to evaluate the extent to which the equipment is essential and appropriate. A list and/or description of related research instruments and computing facilities currently available at or near the submitting institution should be provided, and the request should be justified in this context. For development of new laboratory or training environment, present the design concept, rationale, and development plan in sufficient detail to allow evaluation of its technical feasibility. Provide preliminary results from existing equipment, or appropriate calculations or models to show the performance (capacity, scope, sensitivity, resolution, etc.) to be achieved by the new equipment. Justify the necessity and adequacy of the new equipment for the intended research and educational projects, with reference to existing equipment. Completion of a project timeline (Appendix D) is essential for all proposals.
 - d. *Impact of Project* (Maximum length, 4 pages). Describe how the equipment will contribute to meeting research and educational goals of the institution or consortium of institutions. Indicate how the equipment will attract researchers, students and practitioners in environmental sciences and engineering and socioeconomic disciplines and how the equipment will improve the quality of their research or training. Discuss the potential impact of the proposed project on the Nation's environmental monitoring and research networks and programs. If the project involves partnerships with other Federal, state, local, non-governmental organizations, or private-sector remote sensing industry, attach their letter of agreement describing their role.

e. *Project and Management Plans* (Maximum length, 1 page). Identify management responsibilities. If appropriate, outline procedures for allocating equipment time. Describe user fees if any are planned. Provide plans for maintenance, operation, and technical support of the equipment, and for attracting new users.

5. *References Cited.*

6. *Budget.* Provide a single cumulative budget presenting the eligible project costs requested of NASA, as well as the total institutional cost sharing. The accompanying budget justification must itemize and explain all eligible project costs, assign each to either the request to NASA or institutional cost sharing. Specify the sources and amounts of cost sharing funds, the steps necessary to obtain them, and a projection of when they will be available. A letter of commitment to institutional cost sharing from the appropriate officer of each of the applicable institutions must be appended to the proposal. Price quotes of largest items may be submitted.
7. *Current and Pending Support.* For each investigator, provide the title, source, and amount either per year or for the total period of performance of all current and pending support. If an individual has no current or pending support, include a statement to that effect.
8. *Biographical sketches.* For each investigator, provide a short vitae, listing only biographical, academic or professional essentials, and no more than five recent publications most relevant to the research and teaching/training using the requested equipment. Do not send copies of the publications. Where the number of investigators is large, limit the length and number of biographical sketches.
9. *Letters of partnership* (optional).
10. *Required certifications* (See Appendix E)

Note: No other appended material is permitted.

VII. Evaluation criteria

The evaluation criteria are described below. Criteria 1 and 2 are more important than criteria 3, 4, and 5, and are approximately equal to each other in weight. Criteria 3, 4, and 5 are approximately of equal weight.

1. *Research and educational merit.* Consideration of the quality of the existing research and teaching/training activities and any unique or new capabilities that will ensue from the acquisition of the equipment. Degree to which the institution(s) has enhanced its capability to integrate observations from multiple remote sensing resources, *in situ* measurements, and socioeconomic data. Qualifications of the investigators who will use the equipment and integrate remote sensing knowledge with environmental monitoring and research.
2. *Program relevance.* Degree to which the research and/or educational activities served by the requested equipment advances the goals of MTPE and aligns with the goals and

core strategies articulated in the OSTP/NSTC/CENR proposed framework for integrating the nation's environmental monitoring and research networks and programs. Level of network development with partners in the Federal, state, local, non-governmental organizations, and private-sector remote sensing industry.

3. *Infrastructure need.* The adequacy and appropriateness of the research equipment for current and expected research and educational activities; demonstrated need for improvement of the institutional infrastructure based on analysis of availability, age, condition, and/or capability of existing local resources and infrastructure.
4. *Project impacts.* The breadth and immediacy of the contributions of the project towards improving the institutions' interdisciplinary capabilities, demonstrating the institutions' ability in shared use of the equipment for research and teaching/training, as well as broadening the institutions' capacity and efficacy in influencing the next-generation environmental monitoring systems.
5. *Plans and funding.* The institutional plan for maintenance and operation of the requested equipment. The adequacy of the major users' research support to appropriately utilize the equipment.

VIII. Selection

The results from the evaluation based on the criteria described above constitute the primary basis for award selection. In addition, the selecting official may take into consideration NASA's commitment to Historically Black Colleges and Universities, Other Minority Universities, and non-profit organizations owned and controlled by socially and economically disadvantaged individuals.

IX. Proposal submission and schedule

Submit proposals to:

NRA 97-MTPE-05
Mail Code YSP-44
NASA Headquarters
400 Virginia Avenue, SW, Suite 700
Washington, DC 20024

Submission deadline and timing: by 5 p.m., June 27, 1997.

Copies required: 12

Selecting official: Director, Science Division
 Office of Mission to Planet Earth

Inquiries: Dr. Ming-Ying Wei
 Mail Code YS
 NASA Headquarters
 300 E Street, SW

Washington, DC 20546-0001
TEL: 202/358-0771
FAX: 202/358-2771
Email: ming-ying.wei@hq.nasa.gov

Announcement of selections: August 15, 1997

All prospective proposers are urged to submit a letter of intent before May 21, 1997, in response to this NRA. This information will allow adequate planning for the proposal review process. If feasible, please use the electronic forms available at URL, <http://www.mtpe.hq.nasa.gov/LOI/form.html>, for the PI; and URL, <http://www.mtpe.hq.nasa.gov/LOI/coi.html>, for the Co-I's. If access to Internet is not feasible, please send the following information via FAX at 202/554-3024:

PI and Co-I's names and addresses (including Zip+4);
Title of proposal;
Telephone and FAX numbers;
Email addresses; and
A brief summary of the intended proposal (no more than 3000 characters).

Your interest and cooperation in participating in this opportunity are appreciated.

William F. Townsend
Acting Associate Administrator for
Mission to Planet Earth

Enclosures:

Appendix A, "Relevant URL addresses"
Appendix B, "Guidelines for Responding to NASA Research Announcements for
Solicited Basic Research Proposals"
Appendix C, "Proposal Cover Page"
Appendix D, "Project timeline for acquisition"
Appendix E, "Required certifications"

Appendix A

Relevant URL addresses:

1. NASA/MTPE Home Page

<http://www.hq.nasa.gov/office/mtpe/>

2. MTPE/EOS Project Science Office Home Page

http://spso.gsfc.nasa.gov/spso_homepage.html

3. OSTP/NSTC/CENR publication: Integrating the Nation's Environmental Monitoring and Research Networks and Programs: A Proposed Framework. 117 pp. (March 1997)

<http://www.epa.gov/cludygxb/>

Appendix B
**INSTRUCTIONS FOR RESPONDING TO NASA RESEARCH ANNOUNCEMENTS
(JANUARY 1997)**

(a) General.

(1) Proposals received in response to a NASA Research Announcement (NRA) will be used only for evaluation purposes. NASA does not allow a proposal, the contents of which are not available without restriction from another source, or any unique ideas submitted in response to an NRA to be used as the basis of a solicitation or in negotiation with other organizations, nor is a pre-award synopsis published for individual proposals.

(2) A solicited proposal that results in a NASA award becomes part of the record of that transaction and may be available to the public on specific request; however, information or material that NASA and the awardee mutually agree to be of a privileged nature will be held in confidence to the extent permitted by law, including the Freedom of Information Act.

(3) NRAs contain programmatic information and certain requirements which apply only to proposals prepared in response to that particular announcement. These instructions contain the general proposal preparation information which applies to responses to all NRAs.

(4) A contract, grant, cooperative agreement, or other agreement may be used to accomplish an effort funded in response to an NRA. NASA will determine the appropriate instrument. Contracts resulting from NRAs are subject to the Federal Acquisition Regulation and the NASA FAR Supplement. Any resultant grants or cooperative agreements will be awarded and administered in accordance with the NASA Grant and Cooperative Agreement Handbook (NPG 5800.1).

(5) NASA does not have mandatory forms or formats for responses to NRAs; however, it is requested that proposals conform to the guidelines in these instructions. NASA may accept proposals without discussion; hence, proposals should initially be as complete as possible and be submitted on the proposers' most favorable terms.

(6) To be considered for award, a submission must, at a minimum, present a specific project within the areas delineated by the NRA; contain sufficient technical and cost information to permit a meaningful evaluation; be signed by an official authorized to legally bind the submitting organization; not merely offer to perform standard services or to just provide computer facilities or services; and not significantly duplicate a more specific current or pending NASA solicitation.

(b) NRA-Specific Items. Several proposal submission items appear in the NRA itself: the unique NRA identifier; when to submit proposals; where to send proposals; number of copies required; and sources for more information. Items included in these instructions may be supplemented by the NRA.

(c) The following information is needed to permit consideration in an objective manner. NRAs will generally specify topics for which additional information or greater detail is desirable. Each proposal copy shall contain all submitted material, including a copy of the transmittal letter if it contains substantive information.

(1) Transmittal Letter or Prefatory Material.

- (i) The legal name and address of the organization and specific division or campus identification if part of a larger organization;
- (ii) A brief, scientifically valid project title intelligible to a scientifically literate reader and suitable for use in the public press;
- (iii) Type of organization: e.g., profit, nonprofit, educational, small business, minority, women-owned, etc.;
- (iv) Name and telephone number of the principal investigator and business personnel who may be contacted during evaluation or negotiation;
- (v) Identification of other organizations that are currently evaluating a proposal for the same efforts;
- (vi) Identification of the NRA, by number and title, to which the proposal is responding;
- (vii) Dollar amount requested, desired starting date, and duration of project;
- (viii) Date of submission; and
- (ix) Signature of a responsible official or authorized representative of the organization, or any other person authorized to legally bind the organization (unless the signature appears on the proposal itself).

(2) Restriction on Use and Disclosure of Proposal Information. Information contained in proposals is used for evaluation purposes only. Offerors or quoters should, in order to maximize protection of trade secrets or other information that is confidential or privileged, place the following notice on the title page of the proposal and specify the information subject to the notice by inserting an appropriate identification in the notice. In any event, information contained in proposals will be protected to the extent permitted by law, but NASA assumes no liability for use and disclosure of information not made subject to the notice.

Notice
Restriction on Use and Disclosure of Proposal Information

The information (data) contained in [insert page numbers or other identification] of this proposal constitutes a trade secret and/or information that is commercial or financial and confidential or privileged. It is furnished to the Government in confidence with the understanding that it will not, without permission of the offeror, be used or disclosed other than for evaluation purposes; provided, however, that in the event a contract (or other agreement) is awarded on the basis of this proposal the Government shall have the right to use and disclose this information (data) to the extent provided in the contract (or other agreement). This restriction does not limit the Government's right to use or disclose this information (data) if obtained from another source without restriction.

(3) Abstract. Include a concise (200-300 word if not otherwise specified in the NRA) abstract describing the objective and the method of approach.

(4) Project Description.

(i) The main body of the proposal shall be a detailed statement of the work to be undertaken and should include objectives and expected significance; relation to the present state of knowledge; and relation to previous work done on the project and to related work in progress elsewhere. The statement should outline the plan of work, including the broad design of experiments to be undertaken and a description of experimental methods and procedures. The project description should address the evaluation factors in these instructions and any specific factors in the NRA. Any substantial collaboration with individuals not referred to in the budget or use of consultants should be described. Subcontracting significant portions of a research project is discouraged.

(ii) When it is expected that the effort will require more than one year, the proposal should cover the complete project to the extent that it can be reasonably anticipated. Principal emphasis should be on the first year of work, and the description should distinguish clearly between the first year's work and work planned for subsequent years.

(5) Management Approach. For large or complex efforts involving interactions among numerous individuals or other organizations, plans for distribution of responsibilities and arrangements for ensuring a coordinated effort should be described.

(6) Personnel. The principal investigator is responsible for supervision of the work and participates in the conduct of the research regardless of whether or not compensated under the award. A short biographical sketch of the principal investigator, a list of principal publications and any exceptional qualifications should be included. Omit social security number and other personal items which do not merit consideration in evaluation of the proposal. Give similar biographical information on other senior professional personnel who will be directly associated with the project. Give the names and titles of any other scientists and technical personnel associated substantially with the project in an advisory capacity. Universities should list the approximate number of students or other assistants, together with information as to their level of academic attainment. Any special industry-university cooperative arrangements should be described.

(7) Facilities and Equipment.

(i) Describe available facilities and major items of equipment especially adapted or suited to the proposed project, and any additional major equipment that will be required. Identify any Government-owned facilities, industrial plant equipment, or special tooling that are proposed for use. Include evidence of its availability and the cognizant Government points of contact.

(ii) Before requesting a major item of capital equipment, the proposer should determine if sharing or loan of equipment already within the organization is a feasible alternative. Where such arrangements cannot be made, the proposal should so state. The need for items that typically can be used for research and non-research purposes should be explained.

(8) Proposed Costs.

(i) Proposals should contain cost and technical parts in one volume: do not use separate "confidential" salary pages. As applicable, include separate cost estimates for salaries and wages; fringe benefits; equipment; expendable materials and supplies; services; domestic and foreign travel; ADP expenses; publication or page charges; consultants; subcontracts; other miscellaneous identifiable direct costs; and indirect costs. List salaries and wages in appropriate organizational categories (e.g., principal investigator, other scientific and engineering professionals, graduate students, research assistants, and technicians and other non-professional personnel). Estimate all staffing data in terms of staff-months or fractions of full-time.

(ii) Explanatory notes should accompany the cost proposal to provide identification and estimated cost of major capital equipment items to be acquired; purpose and estimated number and lengths of trips planned; basis for indirect cost computation (including date of most recent negotiation and cognizant agency); and clarification of other items in the cost proposal that are not self-evident. List estimated expenses as yearly requirements by major work phases.

(iii) Allowable costs are governed by FAR Part 31 and the NASA FAR Supplement Part 1831 (and OMB Circulars A-21 for educational institutions and A-122 for nonprofit organizations).

(9) **Security.** Proposals should not contain security classified material. If the research requires access to or may generate security classified information, the submitter will be required to comply with Government security regulations.

(10) **Current Support.** For other current projects being conducted by the principal investigator, provide title of project, sponsoring agency, and ending date.

(11) **Special Matters.**

(i) Include any required statements of environmental impact of the research, human subject or animal care provisions, conflict of interest, or on such other topics as may be required by the nature of the effort and current statutes, executive orders, or other current Government-wide guidelines.

(ii) Proposers should include a brief description of the organization, its facilities, and previous work experience in the field of the proposal. Identify the cognizant Government audit agency, inspection agency, and administrative contracting officer, when applicable.

(d) **Renewal Proposals**

(1) Renewal proposals for existing awards will be considered in the same manner as proposals for new endeavors. A renewal proposal should not repeat all of the information that was in the original proposal. The renewal proposal should refer to its predecessor, update the parts that are no longer current, and indicate what elements of the research are expected to be covered during the period for which support is desired. A description of any significant findings since the most recent progress report should be included. The renewal proposal should treat, in reasonable detail, the plans for the next period, contain a cost estimate, and otherwise adhere to these instructions.

(2) NASA may renew an effort either through amendment of an existing contract or by a new award.

(e) **Length.** Unless otherwise specified in the NRA, effort should be made to keep proposals as brief as possible, concentrating on substantive material. Few proposals need exceed 15-20 pages. Necessary detailed information, such as reprints, should be included as attachments. A complete set of attachments is necessary for each copy of the proposal. As proposals are not returned, avoid use of "one-of-a-kind" attachments.

(f) Joint Proposals.

(1) Where multiple organizations are involved, the proposal may be submitted by only one of them. It should clearly describe the role to be played by the other organizations and indicate the legal and managerial arrangements contemplated. In other instances, simultaneous submission of related proposals from each organization might be appropriate, in which case parallel awards would be made.

(2) Where a project of a cooperative nature with NASA is contemplated, describe the contributions expected from any participating NASA investigator and agency facilities or equipment which may be required. The proposal must be confined only to that which the proposing organization can commit itself. "Joint" proposals which specify the internal arrangements NASA will actually make are not acceptable as a means of establishing an agency commitment.

(g) **Late Proposals.** A proposal or modification received after the date or dates specified in an NRA may be considered if doing so is in the best interests of the Government.

(h) **Withdrawal.** Proposals may be withdrawn by the proposer at any time before award. Offerors are requested to notify NASA if the proposal is funded by another organization or of other changed circumstances which dictate termination of evaluation.

(i) Evaluation Factors

(1) Unless otherwise specified in the NRA, the principal elements (of approximately equal weight) considered in evaluating a proposal are its relevance to NASA's objectives, intrinsic merit, and cost.

(2) Evaluation of a proposal's relevance to NASA's objectives includes the consideration of the potential contribution of the effort to NASA's mission.

(3) Evaluation of its intrinsic merit includes the consideration of the following factors of equal importance:

(i) Overall scientific or technical merit of the proposal or unique and innovative methods, approaches, or concepts demonstrated by the proposal.

(ii) Offeror's capabilities, related experience, facilities, techniques, or unique combinations of these which are integral factors for achieving the proposal objectives.

(iii) The qualifications, capabilities, and experience of the proposed principal investigator, team leader, or key personnel critical in achieving the proposal objectives.

(iv) Overall standing among similar proposals and/or evaluation against the state-of-the-art.

(4) Evaluation of the cost of a proposed effort may include the realism and reasonableness of the proposed cost and available funds.

(j) **Evaluation Techniques.** Selection decisions will be made following peer and/or scientific review of the proposals. Several evaluation techniques are regularly used within NASA. In all cases proposals are subject to scientific review by discipline specialists in the area of the proposal. Some proposals are reviewed entirely in-house, others are evaluated by a combination of in-house and selected external reviewers, while yet others are subject to the full external peer review technique (with due regard for conflict-of-interest and protection of proposal information), such as by mail or through assembled panels. The final decisions are made by a NASA selecting official. A proposal which is scientifically and programmatically meritorious, but not selected for award during its initial review, may be included in subsequent reviews unless the proposer requests otherwise.

(k) **Selection for Award.**

(1) When a proposal is not selected for award, the proposer will be notified. NASA will explain generally why the proposal was not selected. Proposers desiring additional information may contact the selecting official who will arrange a debriefing.

(2) When a proposal is selected for award, negotiation and award will be handled by the procurement office in the funding installation. The proposal is used as the basis for negotiation. The contracting officer may request certain business data and may forward a model award instrument and other information pertinent to negotiation.

(l) **Cancellation of NRA.** NASA reserves the right to make no awards under this NRA and to cancel this NRA. NASA assumes no liability for canceling the NRA or for anyone's failure to receive actual notice of cancellation.

Appendix C
Proposal Cover Page
NASA Research Announcement 97-MTPE-05

Proposal No. _____ (Leave Blank for NASA Use)

Title: _____

Principal Investigator:

Name: _____

Department: _____

Institution: _____

Street/PO Box: _____

City: _____ State: _____ Zip: _____

Country: _____ E-mail: _____

Telephone: _____ Fax: _____

Co-Investigators:

Name	Institution	Telephone
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_____	_____	_____
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_____	_____	_____
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_____	_____	_____
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_____	_____	_____
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Budget:

Request to NASA: _____

Institutional cost sharing: _____

Authorizing Official: _____
(Name) (Institution)

Appendix D

Project Timeline for Acquisition

Institution: _____
Principal Investigator: _____
Proposal Title: _____

Activity	Date(s)
Expected date of NASA award:	<u>10/1/97</u> (M/D/Y)
Expected date cost sharing/matching to be met:	_____ (M/Y)
Research equipment acquisition ¹ :	_____ (M/Y through M/Y)
Bid solicitations:	_____ (M/Y)
Bids received:	_____ (M/Y)
Purchase order issuance:	_____ (M/Y)
Delivery:	_____ (M/Y)
Installation:	_____ (M/Y)
Testing:	_____ (M/Y)
Acceptance/commissioning:	_____ (M/Y)

¹ Indicate expected beginning and ending dates; also identify target dates for completing various stages as appropriate.

Appendix E

Certification Regarding Debarment, Suspension, and Other Responsibility Matters Primary Covered Transactions

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 34 CFR Part 85, Section 85.510, Participant's responsibilities. The regulations were published as Part VII of the May 26, 1988 Federal Register (pages 19160-19211). Copies of the regulation may be obtained by contracting the U.S. Department of Education, Grants and Contracts Service, 400 Maryland Avenue, S.W. (Room 3633 GSA Regional Office Building No. 3), Washington, DC. 20202-4725, telephone (202) 732-2505.

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Organization Name

PR/Award Number or Project Name

Name and Title of Authorized Representative

Signature

Date

Appendix E

Certification Regarding Drug-Free Workplace Requirements Grantees Other Than Individuals

This certification is required by the regulations implementing the Drug-Free Workplace Act of 1988, 34 CFR Part 85, Subpart F. The regulations, published in the January 31, 1989 Federal Register, require certification by grantees, prior to award, that they will maintain a drug-free workplace. The certification set out below is a material representation of fact upon which reliance will be placed when the agency determines to award the grant. False certification or violation of the certification shall be grounds for suspension of payments, suspension or termination of grants, or governmentwide suspension or debarment (see 34 CFR Part 85, Sections 85.615 and 85.620).

This grantee certifies that it will provide a drug-free workplace by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing a drug-free awareness program to inform employees about -
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will -
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction;
- (e) Notifying the agency within ten days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction;
- (f) Taking one of the following actions, within 30 days of receiving notice under subparagraph (d)(2) , with respect to any employee who is so convicted -
 - (1) Taking appropriate personnel action against such an employee, up to and including termination; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraph (a), (b), (c), (e), and (f).

Organization Name

PR/Award Number or Project Name

Name and Title of Authorized Representative

Signature

Date

ED 80-0004

Appendix E

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements.

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000 for each such failure.

Signature and Date

Name and Title of Authorized Representative

Organization Name